

The claims defining the invention are as follows:

1. A method of providing bi-directional communication in a broadcast enabled network,

5 - the method including implementing packet or cell forwarding rules at end user equipments and at a multicast router to enable the separation of downstream and bi-directional or unidirectional upstream flows.

2 A method as claimed in claim 1 wherein unidirectional flows pass from a router to an access node as a single stream and are replicated in the access node for transmission over individual paths to the end user equipments, and wherein
10 individual bi-directional flows are relayed between the router and end user equipments as individual flows via the access node.

3. A method as claimed in claim 1 or claim 2 , in which the rules separate the flows into:

15 - one or more shared point-to-multipoint connections on which unidirectional multicast information flow is transmitted;

 - a dedicated point-to-point connection for each end-user equipment on which other traffic is transmitted.

4. A method is claimed in any one of claims 1 to 3 wherein the information flow is carried on an ATM point to multipoint connection and wherein bi-directional and
20 control flows are carried on an ATM point-to-point connection.

5. A method of providing bi-directional communication in a point-to-multipoint enabled network, the network including:

- a multicast router; and
- a plurality of end-user communication equipments;

25 the method including:

 - implementing packet forwarding rules at the end user communication devices and at the IP multicast router to allow the separation of unidirectional and bi-directional flows;

30 - a method as claimed in the network including:
 - a cell or packet based access node and IP gateway supporting bi-directional point-to-point and unidirectional point-to-multipoint transport connections;

- interposed between the router and the end-user communication equipments.

6. A method as claimed in any one of claims 1 to 5, wherein unidirectional flows between the router and the user equipments are point-to-multipoint ATM flows.

7. A method as claimed in any one of claims 1 to 6 wherein control flows and bi-directional flows are transmitted between the user equipments and the router as point-to-point ATM flows.

8. A method as claimed in any one of claims 1 to 7 wherein the router is an IP multicast router.

9. A point-to-multipoint enabled network including:

- a multicast router;
- a plurality of end user communication equipments;

wherein the end user equipments and the multicast router are controlled by packet forwarding rules to enable the separation of unidirectional and bi-directional flows.

10. A network as claimed in claim 8, including a cell or packet based access node supporting bi-directional point-to-point and unidirectional point-to-multipoint transport connections interposed between the router and the end user communication equipments.

11. A method of providing bi-directional communication substantially as herein described with reference to the accompanying drawings.

12. A network substantially as herein described with reference to the accompanying drawings.

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ALCATEL